

Patent Abstracts of Japan

PUBLICATION NUMBER : 63216011
PUBLICATION DATE : 08-09-88

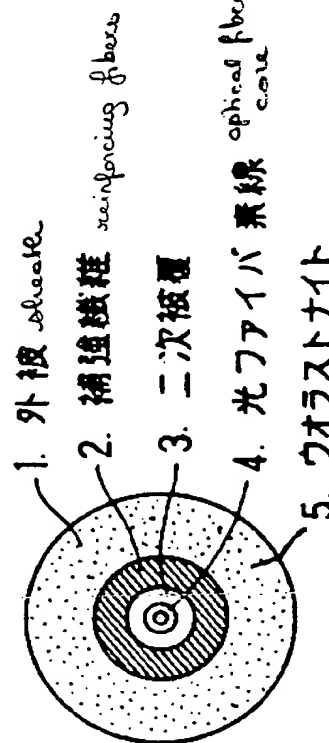
APPLICATION DATE : 04-03-87
APPLICATION NUMBER : 62049617

APPLICANT : TOYOKUNI DENSEN KK;

INVENTOR : NAGASE YOICHI;

INT.CL. : G02B 6/44 C03C 25/02

TITLE : OPTICAL FIBER CORD



ABSTRACT : PURPOSE: To improve the dimensional stability and heat resistance of the title cord by incorporating the needle crystal of calcium metasilicate (wollastonite) in the thermoplastic resin constituting the sheath of an optical fiber cord.

CONSTITUTION: Plural reinforcing fibers 2 are uniformly and longitudinally attached to an optical fiber core 4 or twisted on the core, and the sheath 1 of a thermoplastic resin is coated thereon to form an optical fiber cord. The surface of the needle crystal of calcium metasilicate (wollastonite) contained in the thermoplastic resin constituting the sheath 1 is treated with a silane coupling agent. From 5~200pts.wt., preferably 10~100pts.wt., anisotropic filler such as wollastonite is filled in 100pts.wt. vinyl chloride resin, hence the contraction of the sheath after a heat cycle can be reduced to $\leq 1\%$, and the low-temp. characteristic of the optical fiber cord can be remarkably improved. As a result, the inherent flame resistance of vinyl chloride resin can be fully exhibited, and the dimensional stability can be improved at a low cost.

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l'axigle n'est pas sous forme feuilletée (inosilicate triclinique)

1 - JP63216011/PN - 1
VI MAX IMG

1/1 WPIL - (C) Derwent
AN - 1988-296083 [42]
XA - C1988-131304
XP - N1988-224613
TI - Optical fibre cable - has optical fibre core wire covered with
thermoplastic resin sheath contg. wollastonite
DC - A89 L01 P81 V07
PA - (SUME) SUMITOMO ELECTRIC IND CO
- (TOYO-) TOYOKUNI DENSEN KK
NP - 2
NC - 1
PN - JP63216011 A 19880908 DW1988-42 3p *
AP: 1987JP-0049617 19870304
- JP95062727 B2 19950705 DW1995-31 G02B-006/44 3p
FD: Based on JP63216011
AP: 1987JP-0049617 19870304
PR - 1987JP-0049617 19870304
IC - C03C-025/02 G02B-006/44
AB - JP63216011 A
An optical fibre cord has an optical fibre core wire opt. with several
reinforcing fibres surrounding it, covered with a thermoplastic resin
sheath. The thermoplastic resin contains Ca metasilicate needle shape
crystal (wollastonite).
- ADVANTAGE - Size stability after extrusion moulding of the outer
sheath is improved. (0/0)
MC - CPI: A08-R06B A08-R09 A12-L03A L01-F03A1
- EPI: V07-F01B4
UP - 1988-42
UE - 1995-31